

Revised Draft BWFS/CS Objective Topics and Potential Metrics

PUBLIC SAFETY

ENVIRONMENTAL STEWARDSHIP

ECONOMIC STABILITY

Schedule

Opportunities for Input



PLAN TIMELINES

2013

Q1 | Q2 | Q3 | Q4

2014

Q1 | Q2 | Q3 | Q4

2015-2016

Basin-Wide Feasibility Studies
(Sacramento and San Joaquin Basins)

Milestone 1
Basin Problems, Objectives & System Improvements

Milestone 2
Refined System Configurations

Milestone 3
State Preferred System Configuration

Milestone 4
Public Draft BWFS Report

Milestone 5
Report Revisions

Milestone 6
Final BWFS Report

Central Valley Flood System Conservation Strategy

Objectives and System Improvements

Public Draft Conservation Strategy

Incorporate Conservation Strategy into 2017 CVFPP Update

Regional Flood Management Planning

Problems and Conditions

Preliminary Project List

Draft Finance Plans

Final Regional Plans

WE ARE HERE



Objectives Flow from CVFPP Goals

CVFPP Goals:

What is the vision?

- **Improve Flood Risk Management**
- **Improve Operations and Maintenance**
- **Promote Ecosystem Functions**
- **Improve Institutional Support**
- **Promote Multi-Benefit Projects**

Objective Topics:

What do we want to achieve?

- Risk Reduction to People and Property
- Flood System Flexibility
- Flood System Resiliency
- Wise Floodplain Management

- Ecosystem Processes
- Habitats
- Species
- Stressors

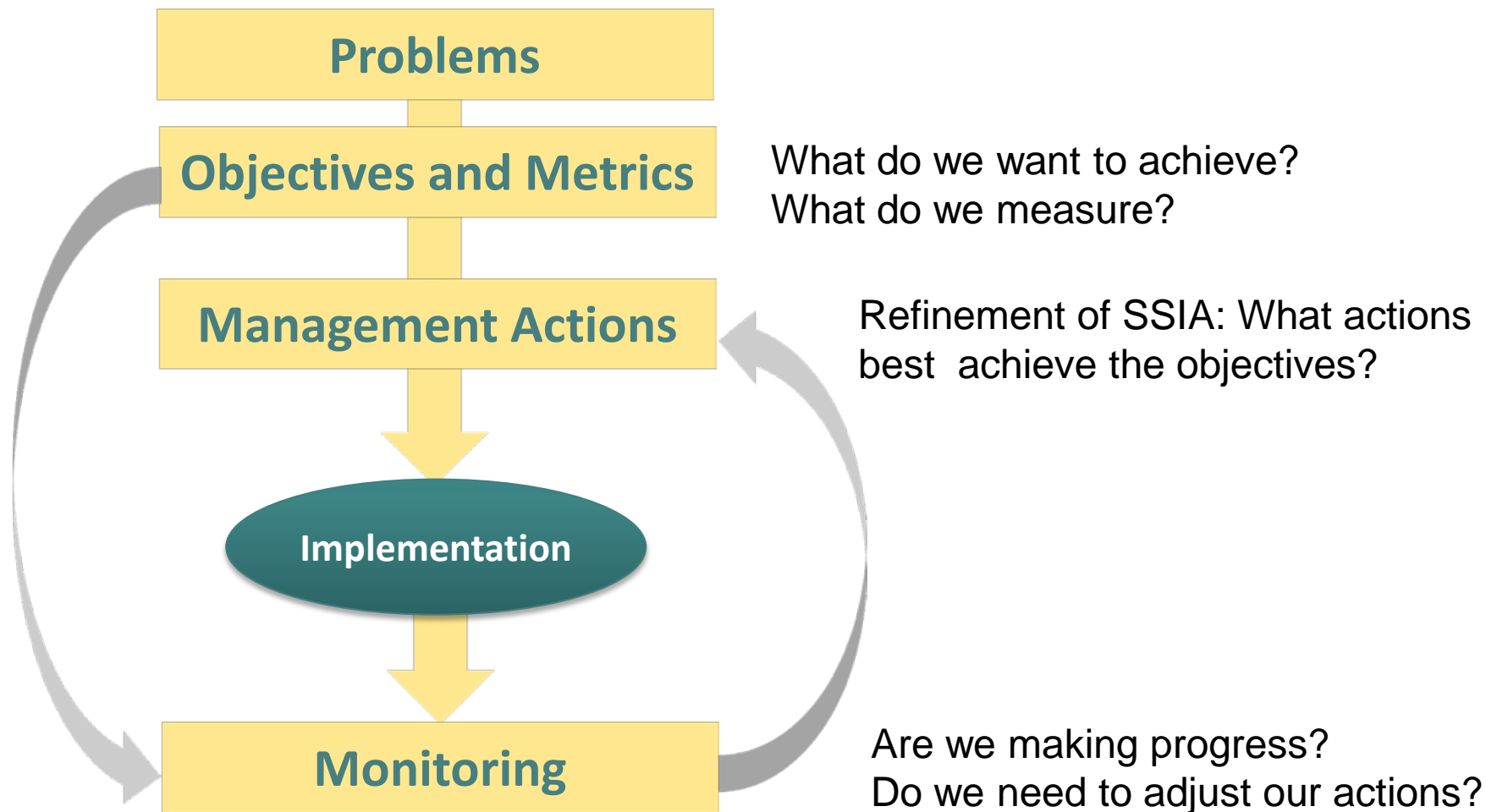
Metrics:

What do we measure?

- Annual probability of flooding
- Risk to human life, health, and safety
- Damages to property and infrastructure (\$)

- Riparian Habitat Amount - total amount and total amount on active floodplain (acres)
- Riparian habitat connectivity – Median patch size (acres)

Role of Objectives



BWFS/CS Objectives Process

- Received comments during May 2nd workshop
- Reviewed objective topics/potential metrics:
 - Removed redundancy
 - Revised for clarity
 - Combined or reorganized
 - Revised metrics to be more practical, efficient, effective, measurable, and meaningful
 - Added new metrics
 - Confirmed applicability of objectives to scope of BWFS/CS

Sample Revisions to Objectives/Metrics

Removed Metrics Example 1

Improve Flood Risk Management

Flood System Resiliency

- **Removed:** “Reduction in cost of post-flood recovery efforts (\$ or %)”
- **Reasoning**
 - Difficult to establish a benchmark or baseline with which to compare
 - Recovery cost is highly dependent on the frequency/severity of an individual event, which varies significantly
 - Recovery costs are difficult to collect

Sample Revisions to Objectives/Metrics

Removed Metrics Example 2

Improve Flood Risk Management

Urban Flood Protection and Rural-agricultural Area Flood Risk Reduction

- **Removed:** Economic effects on regional economies (\$, employment)
- **Reasoning**
 - Regional economics is typically considered as part of economic effects analysis, as opposed to plan formulation.

Sample Revisions to Objectives/Metrics

Combined Metrics - Example 1

Improve O&M, Improve Institutional Support, Promote Multi-Benefit Projects

Project Approvals

- Consolidated the following metrics:
 - Reduced average cost of project permits and other regulatory requirements (\$/project or % project cost)
 - Reduced total cost for permitting SPFC flood management activities (as a portion of total cost) (%)
 - Reduced cost of mitigation (total or per credit)

Revised new metric: Reduction in administrative and mitigation costs associated with permitting SPFC flood management activities (improvement projects and O&M activities)

Sample Revisions to Objectives/Metrics

Combined Metrics - Example 2

Improve Flood Risk Management

Flood System Flexibility

- Consolidated the following metrics:
 - Peak flood stage (or freeboard) that can be safely accommodated (feet)
 - Peak flood flows (cubic feet per second) that can be safely conveyed
 - Increase in flood frequency, peak flood volume, or peak flow (%) increase) that can be safely accommodated

Revised new metric: Increased peak flood volume (acre-feet) and flow (cfs) that can be accommodated in the flood management system (within channels, bypasses, floodplains, or reservoirs)

Sample Revisions to Objectives/Metrics

Revised Metric - Example 1

Promote Ecosystem Functions

Fish Passage Barriers

- **Before:** Number of fish barriers removed
 - Public comment suggested to modify metric to include “number of barriers modified.”
- **After:** Number of fish passage barriers within the flood management system that *are modified* or removed

Sample Revisions to Objectives/Metrics

Revised Metric - Example 2

Improve O&M, Improve Institutional Support, Promote Multi-Benefit Projects

Information and Tools

- **Before:** Number of datasets or tools available to public
 - Public comment suggested datasets/tools should also be available to agencies to assist with planning and implementation
- **After:** Number of datasets or tools **available to agencies** and the public, and web-based usage of those data/tools

Challenges

Developing Metrics for:

- Non-structural actions and physical resiliency measures
- Inundated floodplain
- Reduced conflicts between ecosystem process and flood system maintenance
- Multi-purpose projects

Challenges

Measurement of:

- Reduced long-term O&M and improved system performance or reliability
- Reduced admin and mitigation costs associated with permitting
- Reduced time to acquire permits
- Advance mitigation acres and credits
- Percent of land covered by regional or programmatic permitting mechanisms

Next Steps for Objectives/Metrics

- DWR will continue to refine objectives/metrics for BWFS/CS
- Incorporate draft objective topics and metrics into BWFS and CS
- Please send additional comments to:
cvfmp@water.ca.gov

Clarifying Questions?

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